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AUTHOR Douglass, Rebecca S.
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ABSTRACT

A study was conducted to define a set of alternative organizational models to help overcome current obstacles to Vocational-Technical Education Consortium of States (V-TECS) membership and set the stage for maximum utilization of the cost efficiencies and program improvement benefits of collaborative curriculum development. The methodology included examination of the current situation of consortium characteristics, organizational structures, and membership. Membership patterns and organizational changes of vocational consortia were studied and interviews were conducted with consortia directors. A set of organizational models was derived from the literature. V-TECS was examined from an historical perspective and detailed in the context of other consortium models. Seven alternative models of membership were extrapolated from the 16 possible alternatives. Each was examined in terms of a rationale for the model, results of implementation, costs and resulting products if the plan were implemented with the current categorical number of states, and a comparison of the proposed plan outcomes with the current outcomes. (Charts of alternatives are provided.) One model was recommended as meeting minimum criteria and deviating least from the current model. (Consortium abstracts and comparison charts are appended.) (YLB)

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East Central Network
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The 1984 V-TECS Organizational Structure and Membership Options Study

by Rebecca S. Douglass

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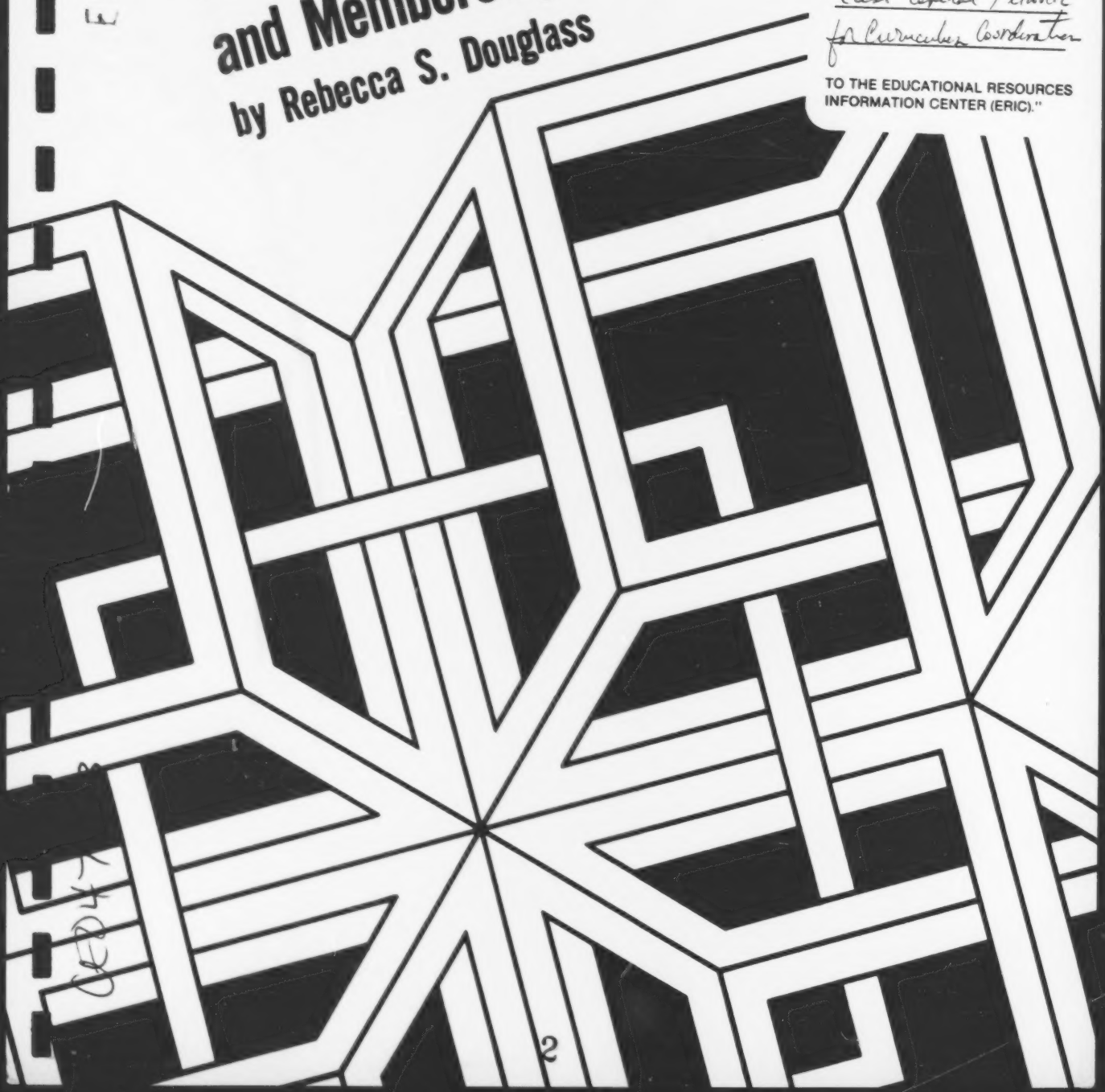

THE 1984

V-TECS ORGANIZATIONAL STRUCTURE

AND

MEMBERSHIP OPTIONS STUDY

by

Rebecca S. Douglass

In collaboration with the
East Central Network for Curriculum Coordination
in
Vocational Technical Education

June, 1984

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I. INTRODUCTION

The most widely accepted approach to vocational education curriculum development in the United States is the performance or competency based method. The crucial feature of competency based vocational education (CBVE) curriculum is the development of a task list. The task list is made up of job competencies identified by workers in the occupation. These competencies then become learning objectives for vocational instruction.

In 1973 an effort was begun for the development of competency based instructional material. Initial agreement was to develop validated competency based task lists, performance objectives, and equipment lists through the shared work of several southeastern states. Today this effort has grown to a collaboration of 14 states called the Vocational Technical Education Consortium of States (V-TECS) with central offices based in Atlanta, Georgia. V-TECS at one point had a membership of 18 states and, over the years, has had 21 states as members.

V-TECS is a unit of the Commission of Occupational Educational Institutions (COEI), Southern Association of Colleges and Schools, which is an accrediting agency for post-secondary vocational technical institutions. COEI promotes research and develops activities for program improvement of vocational programs. COEI has been the housing agency for V-TECS since its inception as depicted in **Figure 1.**

The original V-TECS model was the result of research by its founding director and incorporates rigid standards for the research activities leading to the production of catalogs of tasks, performance objectives, criterion-referenced measures and performance guides (Hirst, 1973).

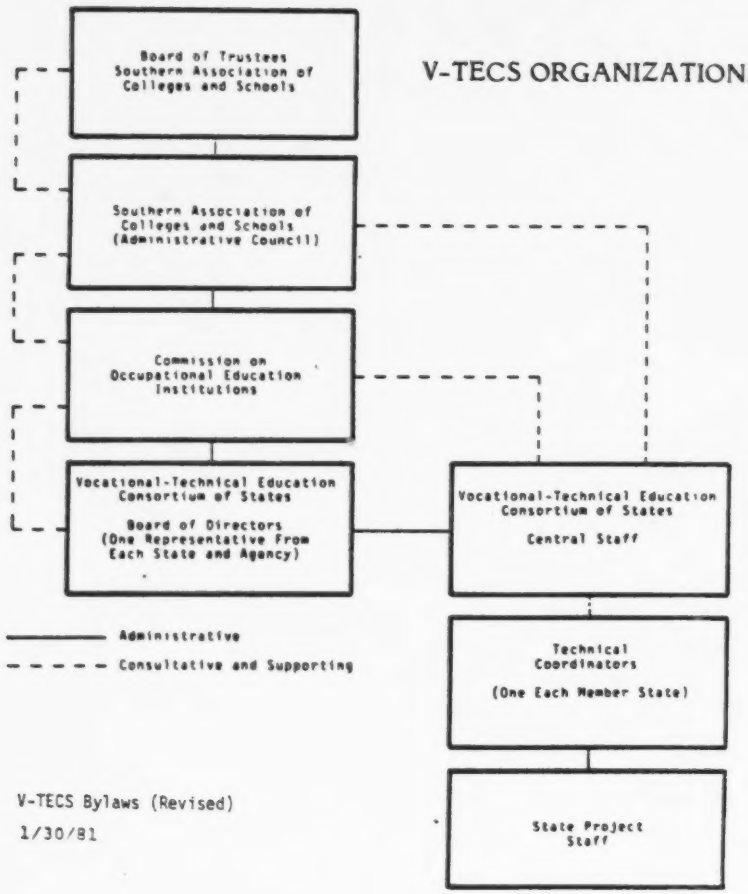
Topics for development are identified through a series of manpower and program needs analyses conducted by V-TECS states and staff, and approved by the V-TECS Board of Directors. Assignments of topics to states are made based on state interests and abilities thus assuring nonduplication.

States may choose to develop in-house or contract the development to another agency such as a university. The model standards must, however, be closely followed and include:

1. State-of-the-art study to identify currently existing curriculum on the topic under development.
2. Incumbent worker interviews to identify tasks/competencies.
3. Verification surveys of tasks, time on tasks, tools and equipment.
4. Development of performance objectives and criterion-referenced measures (CRM) by a team of workers in the occupational area.
5. Field testing.

The process is conducted by each member state based on a fiscal year. When completed the products are shared with member states. States are encouraged to develop state diffusion plans to insure the widespread use of the outcomes.

Figure 1
V-TECS ORGANIZATIONAL STRUCTURE



The consortium products have a high credibility rating in comparison with other models because of the uniform procedures of the V-TECS model, quality control from the Central Office, and the V-TECS commitment to user flexibility.

Responding to the needs of its growing sophistication and accumulated collection of task analyses, the V-TECS Board expanded consortium work in 1980 to include development of curriculum guides based on previously completed task analyses. A new feature involving development of a test item bank will soon be added to the outcomes and available products of the consortium (Memo 150, McCage, May 29, 1984).

Need for the Study

A conflux of needs, including a lack of validated task lists for new occupations, availability of extant task lists, affordability, and time, make it imperative to expand the cooperative activities of consortia like V-TECS to a greater number of states. States that are economically depressed, have unique needs, or have recently embraced the CBVE concept will benefit from cooperative participation in curriculum development.

Participation in a consortium gives members access to curriculum developed by each of the other members. Other consortia, including Mid-America Vocational Curriculum Consortium (MAVCC), the Interstate Distributive Education Consortium (IDECC), the Agency for Instructional Television (AIT), have proven the value of cooperative developmental activities.

Recently, the diversification of V-TECS activities, including sales of products, development of curriculum guides, involvement in testing, and access of a computerized task database through consortium membership, has created a surge of interest from states whose budgets, developmental philosophies, program philosophy, and/or state organizational philosophies are not necessarily in synch with the V-TECS historical stand. Additional interests--local educational agencies and others--are forcing an examination of current organizational structures and membership.

Statement of the Problem

The V-TECS philosophy and purpose stated in the bylaws, which were updated at the January 18, 1984, Board meeting, follow:

> "The purpose of Vocational Technical Education Consortium of States (V-TECS) is to promote the systematic development and implementation of the concept of competency based vocational technical education by securing the active participation of state vocational technical agencies and other appropriate organizations in cooperative research and development efforts which concentrate on, but are not limited to the analysis of jobs and the organization of job related information, the development of vehicles for assessing student achievement and the design, development and/or acquisition of instructional materials that provide a validated link between education and employment." (Bylaws, V-TECS, 1984)

The involvement of states in the joint development of CBVE curriculum has ebbed and flowed since 1973. A total of 21 states have been participating members. At one point a V-TECS board imposed a limit when 18 states were members; later the limit was recinded. Fourteen states are slated for FY85 membership. Two of the states were previous members and are rejoining.

Given the national interest in CBVE and expressions of interest in consortium membership by a number of states across the country, the V-TECS director and some of the member states are concerned that the current organizational structure prohibits maximum involvement by states.

Purpose of the Study

Increased membership in the consortium would be beneficial to both current and incoming members. Therefore, the purpose of this paper is to define a set of alternative organizational models which will help overcome current obstacles to membership and set the stage for maximum utilization of the cost efficiencies and program improvement benefits of collaborative curriculum development.

This report will be presented to the V-TECS Board of Directors for discussion and will be used to restructure and improve membership requirements.

Research Questions

In light of the V-TECS stated purpose to involve states, and the fact of a 14-state membership, the following questions are designed to provide direction to the complexities of this investigation.

1. What are the conditions and benefits of consortium membership?
2. What issues inhibit greater membership in V-TECS under its present organizational and membership structure?
3. What V-TECS Board policies and procedures effect organizational change from the present structure?
4. How can membership obligations be structured to increase membership yet remain cost-efficient?
5. How can membership options be equitably interpreted or applied?
6. How can membership options maintain current levels of operation?

Delimitations

The major delimitation is that organizational structure for V-TECS is already in place. Therefore, certain accommodations must be made which would be unnecessary if an organizational model was being developed without a predecessor. The other delimitation is the need to remain in the realm of cost-efficient alternatives which do not lend themselves to more creative solutions. These factors would involve risk and a long period of time to become cost-efficient.

Limitations

The study's recommended alternatives were limited due to the need to satisfy current state memberships which have a set of policies and procedures, a historical commitment and philosophy, and a set of completed products. These must not be ignored or discounted, but must be incorporated into the rationale for alternatives.

Assumptions

The V-TECS goal is not to structure a membership which will insure that all states would want to join. The assumed goal is to modify the current organization to allow more states of similar philosophy and objectives in competency based curriculum development to benefit from the cost-efficiencies of joint development.

It is assumed that if a new organization is being formed it is easier to develop an equitable organization and membership plan. However, given the limitations and delimitations with an existing organization, it is necessary to determine alternative models which have minimum impact on current membership, in-house budgets, existing products, and risk to the organization as a whole.

Definitions

Consortium has been loosely defined in the literature to involve everything from an informal agreement to work together to a legally-binding joint agreement for specified activities (New York, 1979). Douglass, in a 1982 study of consortia activity, defined consortium as "two or more states involved in a collaborative endeavor which...has implications for curriculum development." Her description included Webster's (1935) definition as follows: CONSORTIUM n.pl. CONSORTIA also CONSORTIUMS 1: An international banking agreement 2: Association, Fellowship, Club, Society 3: Marital association.

The consortia in this study typically have a formal agreement in which each member commits to an obligation of financial and/or non-financial resources to accomplish a predetermined consortium goal, and in which each member has an equal voice in consortium policy setting.

II. REVIEW AND ANALYSIS OF THE LITERATURE

Educational consortia have been in existence for decades and primarily have taken the form of cooperatives by joint sharing of facilities, equipment, and other resources (Bingham, 1974; O'Connor, 1981). From such cost-efficient and effective sharing evolved consortiums of schools and/or agencies for joint development of educational products. Consortorial arrangements reached their peak in the 1970's and the literature is full of information on the organization, premises, and activities of educational consortia. Below are the most frequent issues and findings in the review of the literature which relate to the questions of this study.

Overview of Issues and Findings in Consortium Literature

The major issue in effective consortia as reported by members and authors (Bingham, 1974; Scott, 1977; Frozier, 1982; and Rozanski, 1982), is the need for consortium members or perspective members to be in concert with the goals of the organization.

The literature on educational consortia next emphasized governance as the major issue in consortium organization. Dolce (1981) along with Hansen (1975) and others detail the need for each consortium member to have an equal voice in governance.

The benefits of cost-efficiency in development and inservice activities garnered the third place of importance in the literature (Alderman, 1972; Maddox 1977; Rozanski, 1983).

General features and characteristics of consortia as reported in the literature revealed most consortia to be intra-state in geography. This is in contrast to the inter-state consortiums under study here.

The majority of consortiums have been of relatively short duration and localized, as with teacher inservice consortiums (Smith, 1976; Maddox, 1977; Rozanski, 1982).

Many consortia reported in the literature are for higher education interests conducted among institutions of higher education (Alderman, 1972; Dolce, 1981; Smith, 1976; Scott, 1977); or among localized multi-levels of education agencies (DeBevoise, 1983). Articulation was an emphasis of DeBevoise (1983) who expressed lack of this feature as a major problem.

Although the literature contains detailed descriptions of various consortium objectives and activities it was often unclear as to the funding arrangements for the membership. Many received full Federal funding which may account for their short duration. Most consortia described were of a centralized organizational structure with few products. Those products which were available were disseminated free of charge to members.

Little literature exists about multi-state consortia descriptions or evaluations. However, a good deal of information exists in the form of reports of progress which helped to develop a descriptive profile of consortiums which appears later in this paper.

The past decade has been rife with the advocacy for consortium activity in vocational education curriculum development as evidenced by the volume of consortia

consortia formed since 1970. Ten consortiums were reportedly initiated in the 1970s.

The advocacy of and belief in collaborative development have resulted in some states belonging to more than one consortium. In 1984, the East Central Network for Curriculum Coordination completed an analysis of state memberships in consortia as displayed in **Figure 2** showing multi-consortium memberships.

A review and analysis of the literature on consortiums as well as consortium documents and reports (Bingham, 1974; New York, 1979; Hattwick, 1980; Schilling, 1981; MAVCC, 1983; V-TECS, 1984) resulted in the identification of generalizable characteristics of consortia, issues of concern, obligations, and causes for change.

General Characteristics of Vocational Education Consortia

The characteristics of the vocational consortia parrot characteristics of other educational consortia in that the impetus for developing a consortium involved the following:

1. Common philosophy of curriculum or materials development.
2. Common standards for curriculum or materials development.
3. Single product development (e.g. task lists) or specialization of product by content area (e.g. personnel development).

In his comprehensive description of educational consortia, Scott (1977) suggests that a potential member should not even consider membership unless a commitment to consortium goals is in place. Bradley (1971) and Bingham (1974) reiterate that point and reinforce it with an admonition to not become too diverse. Frazier (1981) also supports the value of common standards and format in his work on vocational-technical consortia developed in Ohio.

Benefits of consortium activity are cited as:

1. Cost savings in sharing among consortia members.
2. Access to greater volume of products.
3. Confidence in product content due to uniform guidelines and procedures.
4. Transportability of products due to common standards.

Efficiencies of cost savings appear to be the primary benefit as supported by Bradley (1971), Alderman (1972), Maddox (1977) and Rozanski (1982) in their evaluations of teacher education consortia.

Up to this point, almost all documented vocational consortia fit the general characteristics and belief in benefits. The following issues show the first major departure from commonalities among consortia.

Issues which have been particularly important in consortium organization and operation have included the following:

1. Equity of obligation assurances that what is contributed

Figure 2
CONSORTIA MEMBERSHIP ROSTERS

STATE	'84 AAVIM	'84 AIT/CORD	'84 IDECC	'84 MAVCC	'84 NNCCVTE	'85 PD	'85 V-TECS
AL	X		X		X		X
AK	X	X			X		
AZ	X	X			X	X	
AR	X	X	X	X	X		
CA	X		X		X		
CO	X			X	X		
CT	X				X		
DE	X		X		X		
DC	X				X		
FL	X	X	X		X	X	X
GA	X		X		X		X
HI	X		X		X		
ID	X	X			X		
IL	X	X			X		X
IN	X	X	X		X		
IA	X	X		X	X		
KS	X	X		X	X	X	X
KY	X				X		X
LA	X	X	X	X	X		
ME	X	X	X		X		
MD	X	X			X		X
MA	X	X			X		
MI	X		X		X		X
MN	X	X	X		X		
MS	X	X	X		X		X
MO	X			X	X		X
MT	X				X		
NB	X	X	X	X	X		
NV	X				X		
NH	X		X		X		
NJ	X				X		
NM	X		X		X	X	
NY	X		X		X		
NC	X	X	X		X		
ND	X	X	X	X	X		
OH	X	X	X		X	X	
OK	X	X	X	X	X		
OR	X	X			X		
PA	X	X	X		X	X	X
RI	X				X		
SC	X	X			X		X
SD	X			X	X		
TN	X		X		X		
TX	X		X	X	X		
UT	X	X			X		
VT	X	X			X		
VA	X	X	X		X		X
WA	X	X	X		X		
WV	X		X		X	X	X
WI	X	X	X		X		
WY	X		X		X		
Alberta	X	X			X		
British Columbia	X				X		
Manitoba	X				X		
New Brunswick	X				X		
Newfoundland	X				X		
Nova Scotia	X				X		
Ontario	X	X			X		
Prince Edward Is.	X				X		
Quebec	X				X		
Saskatchewan	X				X		
N.W. Territory	X				X		
Yukon Territory	X				X		

by one member is relatively equal to that of other members.

2. Affordability of membership to members of differing demographics and financial capacities.
3. Unit of membership requiring certain attributes for full membership (e.g. state education agency) with options for partial, associative, or affiliate status.

These issues are addressed and are weighted differently in every consortium although they are of concern and consume much attention from the consortia boards and staff (Hattwick, 1980).

Obligations and conditions of membership also pose a departure in form among the various consortia. The few commonalities which can be found include:

1. Responsibility to serve on a Board of Directors or similar policy-approving body.
2. Commitment to adhere to bylaws and consortium policy and procedures.
3. Membership dues in the form of direct payment, in-kind contribution, or both.

An examination of Program Improvement expenditure data (NCRVE, 1978-83) verifies that states typically use state Program Improvement funds from Section 130, Part. II, P.L. 94-482 of the 1976 Vocational Education Amendments for consortium membership dues and obligations of development. Funds available to states under that section are shown in **Figure 3.**

Organizational structures also vary but fall into one of the following general categories:

1. Centralized organizational structure in which a central office staff is maintained and is responsible for development of consortium products. It becomes available to all members as a benefit of membership.
2. Decentralized with membership responsibility in which members accomplish development of products under supervision of central office. All products become available to all members as a benefit of membership.
3. Decentralized without membership responsiblity in which central staff contract for or acquire products without active membership involvement. All products become available at pro-rated costs for members.
4. Collaborative organizational structure in which a central staff is maintained and accomplishes some product development while members also accomplish some product development. Some products become available to members as a condition of membership depending upon the wishes of the developing member; other products are purchasable.

Due to the nature of a consortium, changes in organizational structure and membership are not easily accomplished. Much study and documented need are required to accomplish a change which generally requires approval by all members.

Figure 3
VOCATIONAL EDUCATION AND ADULT EDUCATION ALLOTMENTS
July 1, 1984 - June 30, 1985

State or Territory	Basic Grants *	Improvement & Support	Disadvantaged	Consumer & Homemaking	Planning & Evaluation	State Advisory Council on Vocational Education	Total*
Alabama	$11,533,575	$2,034,066	$292,182	$643,814	$73,025	$102,772	$14,576,661
Alaska	851,136	150,108	21,562	47,511	5,389	102,772	1,075,704
Arizona	7,148,672	1,260,742	181,099	399,045	45,262	102,772	9,034,820
Arkansas	6,445,031	1,136,847	163,273	359,788	40,807	102,772	8,145,528
California	50,017,656	8,821,128	1,267,106	2,792,030	116,688	208,772	63,214,808
Colorado	6,746,816	1,189,370	170,918	376,614	42,718	102,772	8,526,936
Connecticut	6,113,914	1,078,251	154,885	341,284	38,711	102,772	7,727,045
Delaware	1,457,597	257,082	36,925	81,384	9,229	102,772	1,842,177
Florida	22,757,217	4,033,469	578,513	1,270,328	144,088	208,771	28,761,815
Georgia	15,940,114	2,811,203	403,814	889,791	100,925	154,273	20,145,847
Hawaii	2,280,552	402,199	57,774	127,303	14,439	102,772	2,882,267
Idaho	2,607,485	459,853	66,056	145,551	16,509	102,772	3,295,434
Illinois	25,013,378	4,411,366	633,699	1,396,269	158,373	208,771	31,613,055
Indiana	14,600,605	2,574,986	369,880	815,019	92,444	139,375	18,452,914
Iowa	7,048,159	1,243,015	178,552	393,434	44,628	102,772	8,907,786
Kansas	5,371,538	947,328	136,078	299,844	34,010	102,772	6,788,796
Kentucky	10,749,680	1,895,816	272,324	600,057	68,062	102,772	13,585,939
Louisiana	11,883,728	2,095,817	301,053	663,360	75,242	102,772	15,019,198
Maine	3,269,985	576,695	82,839	182,534	20,704	102,772	4,132,757
Maryland	9,726,483	1,715,361	246,406	542,940	61,583	102,772	12,292,749
Massachusetts	13,385,620	2,360,692	339,100	747,197	84,752	141,038	16,917,361
Michigan	22,843,460	4,028,679	578,698	1,275,142	144,634	208,771	28,870,813
Minnesota	10,095,302	1,780,410	255,748	563,529	63,919	102,772	12,758,908
Mississippi	7,631,994	1,345,980	193,343	426,025	48,322	102,772	9,645,864
Missouri	12,804,667	2,258,234	324,383	714,768	81,073	102,772	16,183,125
Montana	2,146,561	378,568	54,379	119,823	13,591	102,772	2,712,922
Nebraska	3,884,384	685,051	98,404	216,830	24,594	102,772	4,909,263
Nevada	,800,385	317,516	45,610	100,499	11,399	102,772	2,275,409
New Hampshire	2,383,001	420,267	60,369	133,021	15,088	102,772	3,011,748
New Jersey	14,757,838	2,602,696	373,863	823,796	93,440	152,891	18,651,533
New Mexico	3,956,374	697,747	100,227	220,848	25,050	102,772	5,000,248
New York	38,156,615	6,729,311	966,628	2,129,936	241,590	208,772	48,224,060
North Carolina	17,568,114	3,098,317	445,056	980,668	111,233	169,045	22,203,388
North Dakota	1,753,612	309,267	44,425	97,888	11,103	102,772	2,216,295
Ohio	26,813,149	4,728,774	679,262	1,496,734	169,768	208,771	33,887,687
Oklahoma	7,361,392	1,298,257	186,487	410,919	46,609	102,772	9,303,664
Oregon	6,318,032	1,114,250	160,056	352,678	40,003	102,772	7,985,019
Pennsylvania	28,526,429	5,030,928	722,666	1,592,370	180,616	208,772	36,063,009
Rhode Island	2,431,563	428,831	61,599	135,732	15,395	102,772	3,073,120
South Carolina	9,791,218	1,726,782	248,043	546,554	61,993	102,772	12,374,590
South Dakota	1,906,411	336,215	48,295	106,418	12,071	102,772	2,409,410
Tennessee	13,332,253	2,351,280	337,748	744,218	84,414	131,031	16,849,913
Texas	35,295,218	6,224,674	894,140	1,970,210	223,472	208,772	44,607,714
Utah	4,389,512	774,136	111,200	245,028	27,792	102,772	5,547,666
Vermont	1,510,323	266,361	38,261	84,307	9,563	102,772	1,908,815
Virginia	13,759,731	2,426,670	348,578	768,080	87,120	137,211	17,390,179
Washington	9,434,867	1,663,936	239,015	526,663	59,737	102,772	11,924,218
West Virginia	5,384,192	949,558	136,300	300,550	34,090	102,772	6,804,789
Wisconsin	12,172,431	2,146,733	308,366	679,476	77,070	102,772	15,384,076
Wyoming	1,004,322	177,122	25,443	56,062	6,359	102,772	1,269,308
District of Columbia	1,366,371	240,973	34,615	76,272	8,651	102,772	1,726,882
Puerto Rico	9,870,390	1,740,745	250,048	550,974	67,495	102,772	12,474,652
American Samoa	158,247	27,909	4,009	8,833	1,002	99,907	200,000
Guam	338,324	59,667	8,571	18,885	2,142	99,907	427,589
No. Mariana Islands	158,247	37,909	4,009	8,833	1,002	99,907	200,000
Trust Territory	346,239	61,063	8,771	19,327	2,193	99,907	437,593
Virgin Islands	287,521	50,707	7,284	16,049	1,821	102,772	363,382
Total	$566,887,588	$99,941,170	$14,356,000	$31,633,000	$3,588,000	$7,000,000	$716,205,758

* *Total excludes Advisory Council.*

Source: U.S. Education Department

Typical causes for change in the basic operation of a consortium are attributed to:

1. Major philosophic change by membership.
2. Financial considerations.
3. Legislation affecting content area or the specialization of the consortium.

Focusing on education and especially vocational education, the synthesis of consortium issues gleaned from the literature shows more group consistency in the areas of philosophy and intent than any other area. The commitment to a common philosophy, and thereby policies and procedures, drives the organization. The philosophy includes certain elements which dictate organizational structure as well. From these bases the consortia then splatter into great variations.

Influences and Inhibitors of Consortium Membership

The literature review was supplemented by interviews with four state representatives and seven consortium representatives to identify and clarify details of membership, trends, and perceived inhibitors to membership. The major influences to consortium membership are shown in **Figure 4.**

Lack of Information about Consortium Goals

Most state agencies, which are the primary membership units in consortia, are in agreement as to the value of multi-state developmental efforts. The major historical trend has been for states which have not been in a consortium before to apply for membership in as many consortia as can be afforded with funds available. This tendency is seen as a result of the states not being fully aware of the philosophy and work of each consortium. An intense examination of state needs and matching of needs to consortium has typically not occurred because states drop in and out of consortia as they learn more about the consortia and their own needs.

This situation is detrimental to both parties. For example, a state may join three consortia and find that, after a year or two, only one is worthwhile to that state. The state then drops out of two. There is often a negative feeling on the part of the state that the two consortiums which did not suit the state's needs were a waste of money and time. Actually, the state is as much at fault as the consortium for entering an agreement based on unverified assumptions and expectations.

The consortium which the state has left, on the other hand, may suffer financially from the loss of membership and may harbor untoward feelings for the departing state. It may feel that it has wasted consortium time and effort in initiation and other preliminary work the consortium may have performed or provided on behalf of the incoming member. The consortium also defaults in not explaining itself well enough to the states. The situation of membership-hopping is typical with each of the major consortium reporting annual membership count changes.

Financial Resources

Ability to financially support consortium membership was cited most often as an influence or inhibitor to membership.

Small states with little state-generated resources would seem to be the least likely to join a consortium due to the inability to pay the annual membership fee and also support a State Program Improvement staff and function. However a strong philosophical commitment to the tenents of a consortium may override other activities of a state to the point where a state spends its entire budget on a consortium activity. An example of such a situation in the past is Delaware which committed its total Program Improvement budget to V-TECS.

Other Cost Factors

Aside from membership fees there may be other direct and indirect, or hidden costs to the member.

For example, in the case of a membership which involves a state developmental obligation, the state must support the costs of development above and beyond the annual membership fee. Depending upon the product to be produced and the method used, these costs may be slight or significant.

In the case of membership which does not require a developmental obligation, a state may still incur dissemination costs, printing or purchase costs from the consortium, and personnel costs for coordination of dissemination.

Because of all the possible variations in costs, it has been difficult for a figure to be developed which reflects all costs of any one consortium membership. All of these costs are dictated by the action taken by the member state. This issue relates to the consortium concern for equality of effort and obligation among members; an issue not resulted by any consortium to date.

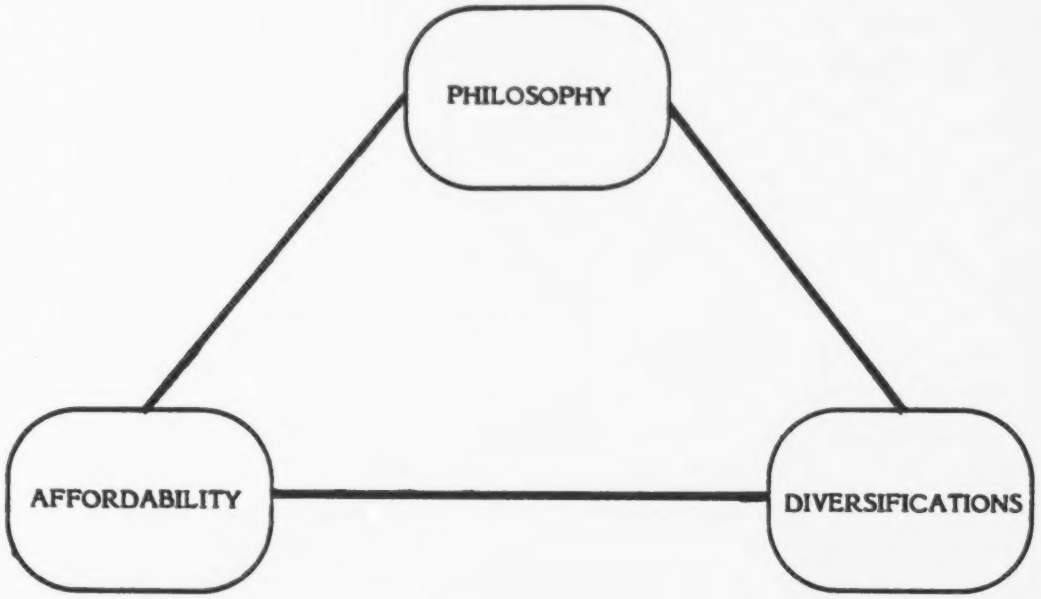
Diversification of Consortia

A lesser but still influential issue determining a state's interest in a particular consortium is the trend toward diversification. Several consortiums which began as single product producers have expanded and diversified.

Two major examples of such diversification include AAVIM and V-TECS. AAVIM began as an agricultural and industrial curriculum developer and now has adopted materials in administration produced by the National Center for Research in Vocational Technical Education and testing materials produced by the American Institutes for Research. V-TECS, which began as a catalog of task and peformance objectives producer, has expanded to include curriculum guides and test development in its product line.

States can fall on either side of the diversification issue. Some will drop out of a consortium for what is perceived as a departure from the original intent of the consortium. Others, which were not interested or committed to previous products, may be attracted by new features of a consortium. This attraction may even override objections previously held.

Figure 4
THREE MAJOR INFLUENCERS TO CONSORTIUM MEMBERSHIP



Since the emphasis of this study is to examine organizational structure and membership options, the major consortia were reviewed in more detail.

Major Curriculum Development Consortia by Organizational Structure

The consortia featured in **Figure 2** on page 8 cover a broad range of concerns in vocational education including teacher and student testing with NOCTI/SOCAT, and professional development with VEPD. The organizational structures also range from centralized as with central staff curriculum development in MAVCC to completely decentralized development by a variety of sources as with AAVIM. Too, the range of commitment of resources is diverse from a rigid financial commitment as with IDECC, to a loosely collaborative commitment as with the NNCCVTE.

A detailed examination of representative consortium models now operating in vocational education for the purpose of curriculum development is shown in **Figure 5.** The categories include organizational structure, unit of membership, obligations, benefits, products, and product availability. Abstracts on these consortia appear in Appendix A.

Organizational structures of vocational consortia favor a centralized administrative staff and development over the decentralized models. All consortia including the Canadian Provinces employ a state level unit of membership with the exception of V-TECS.

Figure 5
FEATURES OF MAJOR VOCATIONAL CONSORTIA

	IDECC 1971	V-TECS 1973	PD 1978	AIT/CORD 1983*	MAVCC 1975	AAVIM 1949	NNCCVTE 1971
ORGANIZATIONAL STRUCTURE	Central/ decentral. w/st. part.	Decentralized w/state part.	Centralized	Centralized	Centralized	Centralized/ decentralized w/o st. part.	Collaborative
UNIT OF MEMBERSHIP	State (29)	State (14)	State (6)	State (28)	State (11)	State	State (57)
OBLIGATIONS	Annual fee based on no. of DE tchrs. in state Members may earn membership credits by dev'g mat'ls	3 levels $20,000 Annual fee Full-Dev. 1-2 products annually Assoc.-Negotiable w/Board Affil.-Negotiable w/Board	3 Levels of Membership Full-$33,360/yr. Assoc.-$21,170 Limited-$12,600	Initial fee or $40,000 + pro-rated fee 5.5¢ based on K-12 state enrollment	$15,000 Annual Fee	Annual fee based on no. of voc. agr. tchrs. in state	Attend reg'l & con. mtgs. Non-direct cost dev. assistance
BENEFITS	Discounts purchases Tech. Asst's Staff Dev. Policy Input Advisory to develop Some complimentary mat'ls	Policy Input Discount purchases Camera ready copy Unlimited Duplicating Tech. Assts Staff Dev. Free Reviews Newsletter DataBank Password Test DataBank Password	Discount purchases Policy input Tech. Asst's. Staff Dev.	Policy Input I set mat'ls Unlimited use Advisory to central dev. Dist. Centers	Policy input Discount purchases of curriculum. Tech. Assist. Searches Toll free no. to central Off. Staff Dev.	Discount purchases Policy Input Tech. Ass'ts Staff Dev.	Free mat'ls sharin Tech. Asst's. Policy Input Databases for cur. develop. Staff Dev.
PRODUCTS	LAPs Trng. Plans, Student Competency Records A-V Software Exams	130 Catalogs 4 Cur. Guides	32 Modules 6 Supportive guides 1 Slidetape	13 Units of instr'l videotape Print. mat'ls	Teacher & Student Materials LAP's A-V Software	Tech. Manuals Tchr. Guides Resource Mat. A-V Testing Pkgs. Software	Curriculum Curr. Related Resources Analysis & Synthesis Papers
AVAILABILITY OF PRODUCTS	IDECC Sales 40% discount to members List price to non-members	Discount sales thru WIU/CPC Indiv. St. Dissem. in member Sts. only	Through AAVIM 20% discount for members	Not ready for mktg., member sts. decide st. diss., others pay surcharge	5 Diss. Centers or MAVCC sales Discount to members	AAVIM Sales St. Diss. Centers in member states Discount 65% thru St. Diss. Center 50% from AAVIM Non-mem. pay higher	Free from CCC's or cost recovery sales on selected items

(ECN, 1984)

The sub-units of membership in V-TECS involve associate and affiliate status which allows purchase of materials but not participation on the Board of Directors, and requires no developmental obligation. Only full membership is considered in this study.

All consortia have a fee per annum. However, diversity exists in the establishment of that fee. Some consortia base the fee on student and/or teacher population. Other consortia use a flat annual fee. For example, the more involvement in curriculum development and policy input, the greater the fee reduction or "break". Policy input is a major feature for full membership. All consortia offer technical assistance and staff development. All consortia make available products for sale but with great differences between and even among distribution centers in the same consortium.

Collaboratives are on the fringe of the study's definition of a consortium. It is because the commitment to resources and the benefits of membership are dependent upon the prerogatives of the individual members rather than policies of the consortium. Because of this, collaboratives will not be further considered.

Summary

The literature synthesis and interviews show that the trend is for agencies to want to join consortia, but that joining is influenced primarily by philosophic and cost factors.

Governance with equal representation is a major factor for successful consortorial efforts as is the ability to be flexible and adaptive in such ways as diversification of product development.

The consortia are split almost equally in their structures with an edge toward centralization. Organizational structure of existing consortia has changed little from the originally conceived structures although philosophies and goals of consortia have shown a tendency to change with need. These changes can effect organizational structure by raising questions pertaining to efficiency and equality.

III. METHODS

The methodology of this study was to first examine the current situation of consortium characteristics, organizational structures, and membership. Specific attention was given to consortia most closely related in organizational philosophy and goals, that being the joint development and sharing of competency based curriculum materials.

Secondly, the situation from an historical perspective, was examined to determine influences and inhibitors to membership and causes of organizational change. Membership patterns and organizational changes of vocational consortia were studied and interviews were conducted with consortia directors. A set of organizational models was derived from the literature.

In this section, V-TECS is examined from an historical perspective and detailed in the context of other consortium models. Alternative membership models were then developed.

V-TECS in Perspective of Other Consortia

The introduction to this paper details the genesis and basis for the development of V-TECS and V-TECS Catalogs. A grouping of like-philosophy and geographically similar states drew together and evolved into a group of greater diversity in size, population, representation, and needs.

The philosophy and goals of the consortium, to share in the development of CBVE curriculum, remain the same. These were reaffirmed in January, 1984 by the governing Board of Directors.

Still, some things have changed. The products and availability of products have been going through a process of adaptation to the perceived needs of the membership and those states which are non-members. These changes are due to the V-TECS philosophy of user flexibility and the desire to share the validated information widely.

State Membership Comparison: Commonalities, Geography and Funding Levels

As noted earlier, the primary reasons for a state to join a consortium involve commitment to philosophy and goals, and affordability. In reviewing the membership rosters of consortia, it is interesting to note the commonalities and differences among consortia membership.

1. States with strong CBVE philosophies and similar budgets have clustered into the MAVCC and V-TECS groups.

2. States with like philosophies and goals in a content area (e.g. distributive education) have joined together, as with IDECC.

3. States with like philosophies and goals, but dissimilar budgets have joined consortia with minimum associated costs like AAVIM and PD (Professional Development).

In comparing the ECN 1982 and current consortia ECN membership rosters, which cover a three year period, a shift in membership is noted primarily in two areas. First, the data reinforce the extrapolation from the literature that states are more prone to join consortia -- all memberships have increased.

Secondly, V-TECS is the consortium with the greatest fluctuation in membership. The reasons for this, based on reports from new or re-entering member states, has to do with the third major influencer in consortium membership, diversification of the products. V-TECS has instituted more changes in products than any other consortium.

While other consortium memberships have remained relatively stable over the past five years, V-TECS has seen the most fluctuation because some states become disenamored with the changes due to diversification while others become enamored and join.

These changes in membership have resulted in the current roster of states which appear in **Figure 6** and are designated with double asterisks. As can be seen, the majority of V-TECS members are in the upper half of states in funding levels, i.e., all V-TECS members are in the over $800,000 category for Federal Program Improvement annual allotments.

Although some states, such as Florida, do not use Federal Vocational Education Program Improvement funds for consortium memberships, the majority do. Therefore, Program Improvement funding levels is a good indicator of a state's ability to afford membership.

The information in **Figure 6** indicates that only the more affluent states can afford membership. Out of the top eight states of over $4 million in Program Improvement funds, four are current members and two are past members. Of the 17 states which fall between $1.5 million and $4 million, seven are current members and four are past members.

Geographical distribution is also remarkable. Of the 25 top states, the V-TECS current members are close geographically to one another forming 3 blocks of midwest, northeast and southeastern states. Three other V-TECS states of less than $1.5 million are also contiguous to the blocks. The change in V-TECS geographical representation has moved from totally southeastern to the North and West. The regional boundaries of the two consortia are shown in **Figure 7.**

In comparison with MAVCC, the geographic and state funding level consistencies are apparent. MAVCC states also form a mass yet are not homogeneous in wealth. MAVCC states are, in general, less wealthy than V-TECS states. Since cost is such a critical factor and if the geography of the consortium has an influence as it appears, then V-TECS would seem to be out of reach for most of the remaining non-member states.

Yet, several small states are members and many others have expressed interest in membership. In order to accommodate these states, benefits must override the cost considerations for those which have the minimum amount of

Figure 6

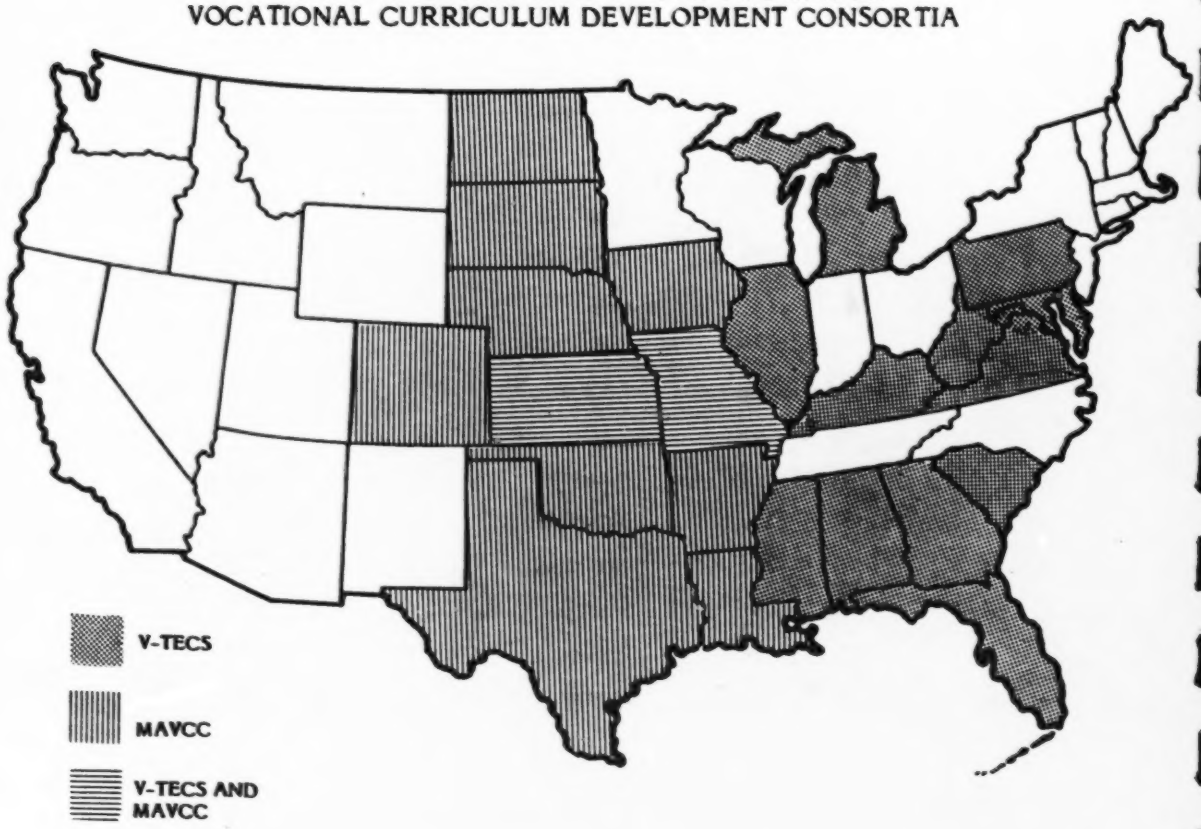
FY 84 STATE PROGRAM IMPROVEMENT ALLOTMENT

California	8,821,126	Iowa	1,243,015
*New York	6,729,311	Colorado	1,189,870
*Texas	6,224,674	Arkansas	1,136,647
**Pennsylvania	5,030,928	Oregon	1,114,250
Ohio	4,728,774	Connecticut	1,078,251
**Illinois	4,441,366	**West Virginia	949,558
**Florida	4,033,469	**Kansas	947,326
**Michigan	4,028,679	Utah	774,136
North Carolina	3,098,317	New Mexico	697,747
**Georgia	2,811,203	Nebraska	685,051
New Jersey	2,602,696	Maine	576,695
*Indiana	2,574,966	Idaho	459,853
Massachusetts	2,360,692	Rhode Island	428,831
**Virginia	2,426,670	New Hampshire	420,267
*Tennessee	2,351,280	Hawaii	402,199
**Missouri	2,258,234	Montana	378,568
*Wisconsin	2,146,733	South Dakota	336,215
*Louisiana	2,095,817	Nevada	317,516
**Alabama	2,034,065	North Dakota	309,267
**Kentucky	1,895,816	Vermont	266,361
Minnesota	1,780,410	*Delaware	257,062
Puerto Rico	1,740,745	District of Columbia	240,973
**South Carolina	1,726,782	Wyoming	177,122
**Maryland	1,715,361	Alaska	150,106
Washington	1,663,936	Trust Territory	61,063
**Mississippi	1,345,980	Guam	59,667
Oklahoma	1,298,257	Virgin Islands	50,707
Arizona	1,260,742	Northern Mariana Island	37,909
		America Samoa	27,090

* Past Member

** Current Member

Figure 7
REGIONAL BOUNDARIES OF THE TWO MAJOR
VOCATIONAL CURRICULUM DEVELOPMENT CONSORTIA



funds available for membership fees and product development. Other states which do not approach having the minimum membership fee must, somehow, be accommodated without damage to other consortium states.

Benefits and Obligations Comparison

Current members receive as (specific rather than philosophic) benefits, the following:

1. Access to 130 completed catalogs; 20 in progress.
2. Access to four completed curriculum guides based on V-TECS catalogs; 19 in progress.
3. 150 copies of Open Entries newsletter for state distribution.
4. Travel to board, technical coordinator, and committee meetings.
5. Password to utilize computerized Data Analysis System for task lists.
6. Access to test item bank (under development).
7. On-call technical assistance from V-TECS central staff.
8. Free product reviews.
9. Staff initial inservice.
10. On-line communication system (under development).

Clearly, as compared to other consortia, see **Figure 4** on page 13, V-TECS offers a variety of products all tied to the CBVE philosophy and V-TECS procedural base, for states which can afford membership and agree with the philosophy. These are in addition to the generalized benefits described in the literature.

Obligations of V-TECS membership originally included the development of two catalogs for developmental cycle. In 1978, a departure from this policy was made to allow a state to develop a curriculum guide in lieu of a catalog. In 1980, a study needed by the consortium was allowed to replace a catalog obligation by another state. Currently, several options are available to members:

1. Develop two catalogs per state per fiscal year by V-TECS guidelines, or
2. Develop one catalog per state per fiscal year and one curriculum guide based on a catalog (which involves updating the catalog if needed)
3. Special studies or multi-year diversification projects.

All members must:

1. Identify a board member and technical coordinator
2. Participate in official V-TECS policy meetings
3. Develop and deliver photo-ready copies of products.

In comparison with other consortia the V-TECS obligations are greater than most in time, effort, and expense to the state. Most other consortia require policy input, advocacy, annual fees, and an understanding that the state will receive discounts on products or will duplicate for state dissemination.

It has been estimated that the V-TECS membership costs to a state are a minimum of $80,000 per year to fulfill the above obligations. Still, as described in the last chapter, there are hidden and non-comparable costs in all consortia for dissemination and development of products. Due to these (e.g. state decisions on how widely to disseminate consortia products) and the varying costs due to differences in state economic considerations (e.g. salaries, printing) a comparison among consortia can only be made in terms of estimates based on experience and/or method of assessing fees.

Cost Comparisons

The best basis for comparison begins with the annual membership fee:

Figure 8
CHART OF CONSORTIA MEMBERSHIP FEES

MAVCC	V-TECS	AAVIM	IDECC	AIT	PD
$15,000	$20,000	Based on St. Ag. teacher pop.	Based on Mktg. & & DE tchr. pop.	Initial $40,000+ 5.5¢ per K-12 student	$33,360 (Full member. w/policy input)

At this point it is useful to separate from consideration consortia which cannot be assumed as a possible alternative for V-TECS. These are the consortia whose membership requirements are more of a formality than a commitment. In AAVIM, for example, a state's membership shows commitment to the AAVIM organization and belief in its ability to deliver quality products. A participation fee is optional.

The membership qualification is therefore to allow discounts on purchases of products, advance information on new products, and input into the viability of new product development without a commitment of funds from the members. Therefore, a member may retain membership and never contribute a dollar to the organization. This actually is more of a subscribership than a consortium and should be eliminated from further consideration. Despite its obvious value and advantage to its subscribers, it does not offer a viable alternative (see consortia papers in Appendix A for further analysis). AAVIM and the Professional Development group are then eliminated.

Next, consideration of annual costs beyond the membership fee which are consistent across the membership. Such costs relate to the in-kind contribution of products or other outcomes which the state has control of thereby exercising its option to put maximum, minimum, or medium effort and cost into producing.

Figure 9
CHART OF CONSORTIA COSTS TO STATES FOR DEVELOPMENT

MAVCC	V-TECS	IDECC	AIT
None	$30,000 per product X 2 = $60,000	None unless state chooses to deliver services in lieu of fees	None

The next element of cost relates to those costs beyond the base membership fee which are different for each member based on some factor such as state student population also called ability to use or state relative ability to pay. These costs are incurred annually.

Figure 10
PRORATED CONSORTIA COSTS TO STATES

MAVCC	V-TECS	IDECC	AIT
None	State Program Improvement Allotment under $1.2 million are required to produce only one product = $30,000	See Mem. Fee	See Mem. Fee

The fourth major element of cost relates to what a member state spends to use, actualize, or implement the outcomes of the consortia. These again are subject to the individual state differences and the reason for joining the consortium. Some states may desire only one copy of each product which would be received as part of the membership fee thereby incurring no additional costs. Others may copy or purchase copies for every program in the state which, depending upon the size of the state, could be several times the amount of the membership fee.

A point should be noted here regarding the state's obligation to disseminate the products of the consortium of which it is a member. It is implicit in the philosophy of the membership that the state will disseminate consortium products to its teachers. In practice this is not true. Some states maintain memberships but do not fully use the products.

Listed below are the array of options for expenditure by a state per consortium for dissemination and utilization (D & U) or utilization and implementation.

Figure 11
D & U COSTS OF CONSORTIA MEMBERSHIP TO STATES

COSTS	MAVCC	V-TECS	IDECC	AIT
Purchase of curriculum	X and/ or	X and/ or	X	
Cost of Reproduction/ Duplication	X	X		X
Costs of Inservice	X	X	X	X
Costs of Dissemination to LEAs w/o Inservice	X	X	X	X

The issues and reasons for changes in organization structure in V-TECS are not only identical with other consortia, but the reason for this paper is based on that set of issues including equality of obligation, affordability to a variety of states, and unit of

membership. These issues, however, are inextricably tied to the organizational structure utilized and the costs of obligations of membership.

Comparison of Organizational Structures and Adoption of Existing Models

In reviewing the organizational structures in use by other consortia there are three basic models:

1. Centralized development of products.
2. Decentralized with states developing products.
3. Decentralized without states developing products.

The major advantages and disadvantages of each structure are charted for ease in comparability:

Figure 12
COMPARISON OF THREE MAJOR ORGANIZATIONAL STRUCTURES

	CENTRALIZED	DECENTRALIZED W/ST. DEV.	DECENTRALIZED W/O ST. DEV.
ADVANTAGES	1. Quality Control - Greater consistency of product due to central staff dev. 2. Cost control - sales are measurable accounting of use/impact 3. In-house staff for development et. al.	1. Involvement of more state staff; state 2. High advocacy of consortium due to investment 3. Maximum no. of products 4. Ability to take a loss in state membership levels or with a "bad" product without damaging Central Staff 5. States absorb major costs	1. Quality Control 2. Cost Control 3. Small in-house staff with ability to contract specialized development
DISADVANTAGES	1. No. of products dependent upon no. of states and ability to support uniform staff development - minimum number of products 2. Inaibility to take a loss w/o damage to Central Staffing 3. Central office absorbs major costs	1. Less quality control over state development 2. No cost control over state development* 3. No control over use by state to advance CBVE - unable to measure impact *Maybe an advantage due to some states giving more than minimum commitment	1. Lack of commitment to goals by developing contractor 2. Same as 2&3 of centralized 3. New development limited by no. of memberships & sales

Advantages and disadvantages are to be found in each model, however, the decentralized models with state developmental participation has a slight edge on advantages.

The most apparent question of importance to a V-TECS-type structure is whether it is wise to change organizational structure dramatically, from decentralized to centralized, after eleven years of relative success. The efficiency of centralization may not balance the loss of involvement and advocacy generated by states participation in development despite the advantages in cost efficiency and managability which have been noted primary advantages in a centralized organizational structure. The V-TECS involvement of states is the highest of any consortium involving Board Membership, Technical Coordinator function at the state level, and state-paid developers.

Secondly, but equally important, is the fact of a set of bylaws (V-TECS Bylaws, 1984) which professes commitment to "active participation...in cooperative research and development." This would eliminate both the centralized and the decentralized models which do not provide for active state participation in developing products.

When the advantages and disadvantages of alternative organizations are weighed, there is no clear justification for making a dramatic change requiring serious modification of V-TECS philosophy of consortium development. Therefore, having rejected the alternative models presented by other consortia, it remains to develop alternative modifications of the current V-TECS models of organization and membership to allow less affluent states to participate.

Requirements for Alternative Models

The assumptions and reasoning which allowed the rejection of other consortium models also limits the creativity with which changes in the current V-TECS model can be made.

Since the organizational structure of a decentralized developmental organization run by a central office staff is sacrosanct, the variations available for modification into alternative membership models are limited to the following:

1. Change in membership fee.
2. Change in product development obligations.
3. Change in both the above which assure equality and non-membership fee costs.

Three major needs must be met by any alternative. These include maintenance of a central office operation at least at current budget levels and maintenance of current levels of product development. The central office is financed through membership fees so the base amount of fees must not decrease.

The third need is to assure equality. Under the current membership structure, costs and obligations include an annual fee of $20,000, annual development costs of approximately $60,000, and dissemination costs including inservice, production and distribution.

Based on the belief that current membership fees and product development costs are beyond the scope of many states, as attested in **Figure 6** on page 18 and, based on the experience of V-TECS that affluent states often contribute more work than the minimum requirements of membership, it is reasonable to develop models of prorated fees and/or obligations. The idea of proration is actually used by three consortia already rejected on philosophy and participation in development grounds. Both AAVIM and IDECC groups base fees on prorations of ability to use, that is, based on the number of teachers of agriculture and distributive education in the states. The PD consortium uses state vocational allotments to determine ability to pay and each state's membership fee.

Prorations could follow one of the following sixteen alternatives if combinations of large states and small states with varying fees and obligations were pursued.

Figure 13
GRID OF ALTERNATIVES FOR VARIABLE STRUCTURES OF FEES AND OBLIGATION

	High Fee	Low Fee
High obligation to develop	A	B
Low obligation to develop	C	D

Two types of proration become immediately apparent. The first puts the heaviest burden on the most wealthy states by increasing the membership fee and the obligation for development load. This could stabalize the organization and allow lucrative low fees and perhaps no obligation for small or less affluent states.

The reverse of this would be the states of wealth paying a higher membership fee but with no obligation for development. Small states would then carry the load of development but pay no annual dues. This situation also stabalizes the organization allowing small states to have control over development costs taking advantages of cheaper development costs.

The second alternative is rejected for two reasons. The larger states are typically generous in their participation, often contributing more development outcomes than the minimum required by membership. This type of arrangement would alleviate these states and may lower their level of interest in a consortium in which they merely pay very high dues. Secondly, development done "on the cheap" could have the effect of lowering overall quality. Thirdly, even low cost development may be beyond the scope of many states because the development costs are the most expensive part of consortium membership. These and other alternative models are considered next.

IV. ALTERNATIVE MODELS

Seven alternative models of membership were extrapolated from the 16 possible alternatives. Each is discussed below along with a rationale for the model and a completed chart on each model showing the results of implementation, the costs and resulting products if the plan were implemented with the current categorical number of states, and a comparison of the proposed plan outcomes with the current outcomes.

In reviewing Federal vocational education allotments, a few natural breaks were apparent. These were used to categorize the states by ranges of funds received for Program Improvement purposes. This method was used in the absence of any other criterion available on which to judge the states' ability to pay/participate in V-TECS.

Each model is assessed in light of the minimum criteria for acceptability of an alternative model. Those criteria are:

- The model must not decrease the current consortium operational budget, i.e. $280,000.
- The model must not decrease the amount of products or output level enjoyed under the current model, i.e. 26 for FY85.
- The model must be equitable to current and future member states (i.e. affordable).

Comments on Chart Format

The following charts of alternatives begin with the current model of operation with explanations on the format used for the charts.

The V-TECS States/Number States in Category shows the number of states V-TECS now has in each Program Improvement category of funding and the potential membership or total number of states in that category.

The V-TECS Annual Fee column shows the fee structure under consideration in each model by Program Improvement categories.

The number of products may be a combination of catalogs, curriculum guides, and special projects. It would be expected that alternative models would maintain the current level of product development.

Estimated Dissemination and Utilization (D&U) costs are projected per year for each state. These costs are, as noted earlier in this paper, extremely difficult to gauge. Based on V-TECS experience and informal reporting by member states, the figures used for estimated D&U costs are used across all models as an acceptable median.

The lower horizontal totals reflect figures for use in comparison of the alternative models with one another and with the current situation.

It should be noted that the total of the number of products and the estimated cost of product development are representative of the amount of return which a state receives as a result of membership and fulfillment of obligations. This figure and the total costs to state with current membership is also a gauge of the amount, in dollars, of national vocational education effort devoted to the CBVE model V-TECS embodies. These items are not part of the criteria for acceptance, however, they are interesting features to note.

Figure 22 provides an "across the models" comparison of the salient features and ability of each model to meet minimum criteria.

Features of Current V-TECS Membership Model

This model reflects the current situation of four V-TECS member states in the $4-8 million category, seven V-TECS member states in the $1.5-4 million category, and three V-TECS member states in the $800,000-1.5 million category, comprising 14 out of a potential of 57 states and Trust Territories.

Annual fees of $280,000 comprise the central office operating budget from which office and personnel costs, consultants, and membership meetings must be paid.

A total of 26 product outcomes will become available to the membership at the end of FY85 signifying an estimated $810,000 worth of developed outcomes. This, when compared to the cost of membership to a state, equates to a median 90:1 ratio or $90 in product return on each dollar spent in consortium membership, fees and obligation costs to the state. D&U costs are not figured in this ratio because these are costs absorbed by the individual states for individual state benefits.

Figure 14

CURRENT MEMBERSHIP MODEL

PI ALLOTMENT COST CATEGORY	STATES IN CATEGORY	V-TECS STATES	V-TECS ANNUAL FEE	PRODUCT NUMBER/COST*		EST'D D&U COST	TOTAL COST PER STATE
$4-8 Million	8	4	$20,000 (80,000)	2	$60,000 (240,000)	$15,000 (60,000)	$95,000 (380,000)
1.5-4M	17	7	20,000 (140,000)	2	60,000 (420,000)	10,000 (70,000)	90,000 (630,000)
800,000 - 1.5M	10	3	20,000 (60,000)	2 1**	60,000 30,000 (120,000) (30,000)	5,000 (15,000)	85,000 55,000 (225,000)
150,000 - 800,000	17	0	20,000 (0)	1	30,000 (0)	5,000 (0)	55,000 (0)
Below 150,000	5	0	20,000 (0)	1	30,000 (0)	2,000 (0)	52,000 (0)
Totals With (FY85) Current Membership***	57	14	280,000	26	810,000	145,000	1.235M

*Cost is estimated at $30,000 per product based on an average cost computed from data supplied by members

**In this category current policy allows states with less than $1.2M Program Improvement allotment to develop only one product

***Totals in this band are based on the costs per state times the 14 current V-TECS states.

Model A

Rationale: Model A is a projection based on the premise that large, affluent states can better afford membership, can utilize the results of membership to a greater extent, and have a greater capacity for development.

Figure 15

MODEL A

PI ALLOTMENT COST CATEGORY	STATES IN CATEGORY	V-TECS STATES	V-TECS ANNUAL FEE	PRODUCT NUMBER/COST*		EST'D D&U COST	TOTAL COST PER STATE
$4-8 Million	8	4	$25,000 (100,000)	3	$90,000 (360,000)	$15,000 (60,000)	$130,000 (520,000)
1.5 - 4M	17	7	20,000 (140,000)	2	60,000 (420,000)	10,000 (70,000)	90,000 (630,000)
800,000-1.5M	10	3	15,000 (45,000)	2	60,000 (180,000)	5,000 (15,000)	80,000 (240,000)
150,000 - 800,000	17	0	10,000 (0)	1	30,000 (0)	5,000 (0)	45,000 (0)
Below 150,000	5	0	5,000	REVIEWS	0 (0)	2,000 (0)	7,000 (0)
Totals With (FY 85) Membership Under This Model	57	14	285,000	32	900,000	145,000	1.33M
Totals With (FY85) Membership Under Current Model	57	14	280,000	26	810,000	145,000	1.235M

*Cost is estimated at $30,000 per product based on an average cost computed from data supplied by members

Features of Model A:

1. Meets and exceeds minimum criteria by $5,000 for maintenance of V-TECS operating budget.
2. Exceeds product output in comparison with FY85 output by 6.
3. May or may not be seen as equitable by category 1 states.
4. Provides affordable option for small allotment states.
5. Provides obligations in indirect cost-type service such as review of other state's drafts, etc. for category 5 states.
6. Increases return on all membership investments.

Model B

Rationale: Same as Model A.

Figure 16

MODEL B

PI ALLOTMENT COST CATEGORY	STATES IN CATEGORY	V-TECS STATES	V-TECS ANNUAL FEE	PRODUCT NUMBER/COST*		EST'D D&U COST	TOTAL COST PER STATE
$4-8 Million	8	4	$25,000 (100,000)	3	$90,000 (360,000)	$15,000 (60,000)	$130,000 (520,000)
1.5 - 4M	17	7	20,000 (140,000)	2	60,000 (420,000)	10,000 (70,000)	90,000 (630,000)
800,000- 1.5M	10	3	15,000 (45,000)	1	30,000 (90,000)	5,000 (15,000)	50,000 (150,000)
150,000 - 800,000	17	0	10,000	REVIEWS	0 (0)	5,000 (0)	15,000 (0)
Below 150,000	5	0	5,000		0 (0)	2,000 (0)	7,000 (0)
Totals With (FY 85) Membership Under This Model	57	14	285,000	29	870,000	145,000	1.30M
Totals With (FY85) Member-ship Under Current Model	57	14	280,000	26	810,000	145,000	1.235M

*Cost is estimated at $30,000 per product based on an average cost computed from data supplied by members

Features of Model B

1. Meets and exceeds by $5,000 minimum criteria for maintenance of V-TECS operating budget.
2. Exceeds current product output by 3.
3. May or may not be seen as equitable by category 1 states.
4. Provides affordable option.
5. Provides obligations in indirect cost-type services for categories 4 and 5.
6. Increases return on membership investments.

Model C

Rationale: The reverse of Models A and B. The rationale here is that to maintain equitability of the total cost per state by allotment, states pay more in fees but less in developmental obligation.

Figure 17

MODEL C

PI ALLOTMENT COST CATEGORY	STATES IN CATEGORY	V-TECS STATES	V-TECS ANNUAL FEE	PRODUCT NUMBER/COST*		EST'D D&U COST	TOTAL COST PER STATE
$4-8 Million	8	4	$25,000 (100,000)	1	$30,000 (120,000)	$15,000 (60,000)	$70,000 (280,000)
1.5 - 4M	17	7	20,000 (140,000)	2	60,000 (420,000)	10,000 (70,000)	90,000 (630,000)
800,000-1.5M	10	3	15,000 (45,000)	2	60,000 (180,000)	5,000 (15,000)	80,000 (240,000)
150,000 - 800,000	17	0	10,000 (0)	3	90,000 (0)	5,000 (0)	105,000 (0)
Below 150,000	5	0	5,000 (0)	REVIEWS	0 (0)	2,000 (0)	7,000 (0)
Totals With (FY 85) Membership Under This Model	57	14	285,000	24	720,000	145,000	1.15M
Totals With (FY85) Membership Under Current Model	57	14	280,000	26	810,000	145,000	1.235M

*Cost is estimated at $30,000 per product based on an average cost computed from data supplied by members

Features of Model C:

1. Meets and exceeds by $5,000 minimum criteria for maintenance of V-TECS operating budget.
2. Decrease in products by 2.
3. Not equitable to small allotment states.
4. Not affordable option for maximum number of states.
5. Provides obligations of non-direct cost nature for category 5 allotment states.
6. Does not increase return on investments.

Model D

Rationale: An alternate reverse of Models A, B and C. A more equitable situation would result from a reduced fee structure matched to an increased product obligation.

Figure 18

MODEL D

PI ALLOTMENT COST CATEGORY	STATES IN CATEGORY	V-TECS STATES	V-TECS ANNUAL FEE	PRODUCTS NUMBER/COST*		EST'D D&U COST	TOTAL COST PER STATE
$4-8 Million	8	4	$10,000 (40,000)	3	$90,000 (360,000)	$15,000 (60,000)	$115,000 (460,000)
1.5 - 4M	17	7	15,000 (105,000)	2	60,000 (420,000)	10,000 (70,000)	85,000 (595,000)
800,000-1.5M	10	3	20,000 (60,000)	1	30,000 (90,000)	5,000 (15,000)	55,000 (165,000)
150,000 - 800,000	17	0	25,000 (0)	REVIEWS	0 (0)	5,000 (0)	30,000 (0)
Below 150,000	5	0	5,000 (0)		0 (0)	2,000 (0)	7,000 (0)
Totals With (FY 85) Membership Under This Model	57	14	205,000	29	870,000	145,000	1.22M
Totals With (FY85) Member-ship Under Current Model	57	14	280,000	26	810,000	145,000	1.235M

*Cost is estimated at $30,000 per product based on an average cost computed from data supplied by members

Features of Model D:

1. Does not meet minimum criteria for maintenance of V-TECS operating budget.
2. Increases product by 3.
3. Equitable based on reduction for current fees and prorated by state PI allotment.
4. Affordable option for maximum number of states.
5. Provides obligations of a non-direct cost nature for categories 4 & 5.
6. Does increase return on investments.

Model E

Rationale: A modification in membership fees and obligations for the groups least likely to be members because of cost would increase membership in those states.

Figure 19

MODEL E

PI ALLOTMENT COST CATEGORY	STATES IN CATEGORY	V-TECS STATES	V-TECS ANNUAL FEE	PRODUCTS NUMBER/COST*		EST'D D&U COST	TOTAL COST PER STATE
$4-8 Million	8	4	$20,000 (80,000)	2	$60,000 (240,000)	$15,000 (60,000)	$95,000 (380,000)
1.5 - 4M	17	7	20,000 (140,000)	2	60,000 (420,000)	10,000 (70,000)	90,000 (630,000)
800,000-1.5M	10	3	20,000 (60,000)	1	30,000 (90,000)	5,000 (15,000)	55,000 (165,000)
800,000	17	0	15,000 (0)	1 SPECIAL	30,000 (0)	5,000 (0)	50,000 (0)
Below 150,000	5	0	5,000 (0)	REVIEWS	0 (0)	2,000 (0)	7,000 (0)
Totals With (FY 85) Membership Under This Model	57	14	280,000	25	750,000	145,000	1.175M
Totals With (FY85) Membership Under Current Model	57	14	280,000	26	810,000	145,000	1.235M

*Cost is estimated at $30,000 per product based on an average cost computed from data supplied by members

Features of Model E:

1. Maintaining V-TECS operational budget.
2. Reduces products by 1.
3. Equitable.
4. Affordable.
5. Reduced Obligation.
6. Provides non-direct cost obligation options for category 5 states.
7. Does not increase return on investments.

Model F

Rationale: A reduced fee structure would help increase membership for typically non-member states. An accompanying reduction in obligations would be further enhancement to members due to decreased state developing costs.

Figure 20

MODEL F

PI ALLOTMENT COST CATEGORY	STATES IN CATEGORY	V-TECS STATES	V-TECS ANNUAL FEE	PRODUCTS NUMBER/COST*		EST'D D&U COST	TOTAL COST PER STATE
$4-8 Million	8	4	$20,000 (80,000)	2	$60,000 (240,000)	$15,000 (60,000)	$95,000 (380,000)
1.5 - 4M	17	7	20,000 (140,000)	1	30,000 (210,000)	10,000 (70,000)	60,000 (420,000)
800,000 - 1.5M	10	3	20,000 (60,000)	1	30,000 (90,000)	5,000 (15,000)	55,000 (165,000)
150,000 - 800,000	17	0	15,000 (0)	REVIEWS	0 (0)	5,000 (0)	20,000 (0)
Below 150,000	5	0	5,000 (0)	REVIEWS	0 (0)	2,000 (0)	7,000 (0)
Totals With (FY 85) Membership Under This Model	57	14	280,000	18	540,000	145,000	965,000
Totals With (FY85) Member-ship Under Current Models	57	14	280,000	26	810,000	145,000	1.235M

*Cost is estimated at $30,000 per product based on an average cost computed from data supplied by members

Features of Model F:

1. Maintains V-TECS operational budget.
2. Reduces product by 8.
3. Equitable.
4. Affordable.
5. Reduces obligations.
6. Provides non-direct cost obligation options for categories 4 and 5.
7. Does not increase return on investments.

Model G

Rationale: Same as Model F.

Figure 21

MODEL G

PI ALLOTMENT COST CATEGORY	STATES IN CATEGORY	V-TECS STATES	V-TECS ANNUAL FEE	PRODUCTS NUMBER/COST*		EST'D D&U COST	TOTAL COST PER STATE
$4-8 Million	8	4	$20,000 (80,000)	2	$60,000 (240,000)	$15,000 (60,000)	$95,000 (380,000)
1.5 - 4M	17	7	20,000 (140,000)	2	60,000 (420,000)	10,000 (70,000)	90,000 (630,000)
800,000 - 1.5M	10	3	15,000 (45,000)	1	30,000 (90,000)	5,000 (15,000)	50,000 (150,000)
150,000 - 800,000	17	0	15,000 (0)	REVIEWS	0 (0)	5,000 (0)	20,000 (0)
Below 150,000	5	0	5,000 (0)	REVIEWS	0 (0)	2,000 (0)	7,000 (0)
Totals With (FY 85) Membership Under This Model	57	14	265,000	25	750,000	145,000	1.16M
Totals With (FY85) Member-ship Under Current Model	57	14	280,000	26	810,000	145,000	1.235M

*Cost is estimated at $30,000 per product based on an average cost computed from data supplied by members

Features of Model G:

1. Reduces V-TECS operational budget.
2. Reduces products by 1.
3. Equitable.
4. Affordable.
5. Reduces obligations.
6. Provides non-direct cost obligation options for categories 4 and 5.
7. Does not increase return on investments.

Analysis of Models

A descriptive analysis across models by minimum criteria of comparison of fees, comparison of number of products, and cost of products development per state, and a comparison of total costs per state was made. These data appear in Appendix B.

A further analysis of all criteria and factors considered across the models was made and appears in **Figure 22** below.

Figure 22

COMPARISON SUMMARY OF ALTERNATIVE MODELS BASED ON MINIMUM CRITERIA AND OTHER SALIENT FEATURES

	A	B	C	D	E	F	G
Meets min. criteria for operating budget	(+$5,000) yes	(+5,000) yes	(+5,000) yes	(-75,000) no	(X) yes	(X) yes	(-15,000) no
Meets min. criteria for product output	yes (+6)	yes (+3)	no (-2)	yes (+3)	no (-1)	no (-8)	no (-1)
Equitable based on prorations	?	?	no	?	yes	yes	yes
Provides affordable option for all states based on PL 94-482 Prog. Impr. options vs. current fees	yes	yes	no	yes	yes	yes	yes
- FOR INFO ONLY -							
Maintains or increases return on membership investment	(+90,000) yes	(+60,000) yes	(-90,000) no	(+60,000) yes	(-60,000) no	(-190,000) no	(-60,000) no
Maintains or increases total V-TECS investment in CBVE	yes	yes	no	yes	no	no	no

This figure reveals which models meet the minimum criteria and, by how much each model exceeds or fails to meet the criteria of the current operating year's figures. By examination of these data Models C, D, and F were rejected for the following reasons:

Model C did not meet the minimum criteria of equitability and affordability. It also would have the effect of reducing products by 2.

Model D did not meet the minimum criteria for maintenance of the V-TECS Central Office operating budget and affordability. The equitability was questionable due to the increase in fee for states least likely to afford fees.

Model F greatly reduced the level of product development.

At this point Models A and B which hold the rationale of "Pay More - Do More" for large allotment states seem to be the most persuasive models followed by Models E and G.

However, A and B are questionable on the minimum criterion of equity. Equity is defined as an assessment of fee based on an "ability to pay" prorated basis which is lower than the current membership fee. In these two models, both the fee and the obligation for development are increased over current levels raising total costs of membership $35,000 per state. Having no common level of significance by which states in Category 5 might reject or accept these alternatives, it remains an individual state decision and conjecture on the part of this analysis to determine the acceptability of these two models which are so closely aligned.

In considering Models E and G, each deviates from the criterion of number of products produced per year by one product (-1). This reduction may not be seen as significant due to the facts that: a) a state may, of its own accord because of state priorities complete more than the minimum commitment of products for V-TECS, thus eliminating a product level; and b) it is not rare for a state to become in arrears in its product development, thus often presenting a low product count equal to the deficit of this model. Model E meets all other criteria.

Model G fails to reach the criterion of maintenance of current V-TECS operational budget levels by $15,000. How significant a reduction the budget would allow has not been addressed in this study and must be decided by the V-TECS Board. Other central office budget factors, such as the upcoming sales of materials for profit through an outside source, may influence the acceptability of this model.

Models E and G do, however, provide the least dramatic change in policy and fees from the current model.

Summary and Recommendations

Based on the foregoing analysis, Model E is recommended as the model which meets minimum criteria and deviates the least from the current model. Given the

requirements of maintaining a level of funding and product development consistent with current rates, and, given the need to be equitable to present and future member states, Model E provides the best alternative and compromise among the models examined. This model should be the most acceptable step in achieving a more affordable membership option for the states which cannot currently join because of financial considerations.

Comments on Affiliate and Associative Membership

Earlier in this paper the point was made that only full membership options would be studied due to the fact that neither affiliate nor associate memberships carry policy approval considerations, do not merit memberships on the Board of Directors, and carry no developmental obligations. In this light, affiliate or associate members function more as subscribers.

The reader may point to the fact that several optional models also carry no developmental obligations for states in categories 4 & 5. It should be clearly noted, however, that the states in these categories would be obligating some type of indirect cost service or deliverable which would be negotiated annually at the same time priorities for development are negotiated by developing states. As with the developmental priorities, the negotiations would be conducted by the V-TECS Executive Director.

V. REFERENCES

Alderman, J. D. The consortium: cooperation can pay off. College Management, 1972, I (6), 14-15.

Bingham, H. S. The cooperative goals in consortia: criteria for the evaluation of effectiveness. Unpublished doctoral dissertation, George Peabody College for Teachers, 1974.

Bradley, A. P., Jr. The five E's of consortium effectiveness. Paper presented at the Consortium Director's Seminar, Washington, DC, 1971. (ERIC Document Reproduction Service No. ED077478).

De Bevoise, W. (Ed). Collaboration wears a layered look. R&D Perspective, Spring - Summer, 1983.

Dolce, P. C. The consortium approach; preserving college decision-making. Proceedings of the National Conference on Technology and Education, 1981.

Douglass, Rebecca S. Consortium, Consortia, Consortiae*. Springfield, IL.: East Central Network, 1982.

East Central Network for Curriculum Coordination. The alphabet soup of of dissemination: knowledgeable networking. Springfield, IL, Author, 1981.

Frasier, J., & Stanton, W. Operational procedures for successful voc-tech resource consortia in serving business and industry in Ohio. Columbus, OH: Ohio State Advisory Council on Vocational Education, 1982.

Hansen, J. H. (Ed). Governance by consortium. Toledo, OH: National Consortium of Competency Based Education Centers, 1976.

Hattwick, R. E. The 1980 V-TECS marketing study. Springfield, IL: Illinois State Board of Education, 1980.

Maddox, K., & Mahan, J. National ATE commission for consortium study and development final report. Washington, DC: Association for Teacher Educators, 1977.

Mc Cage, Ronald D. Second meeting on testing. Memo 150. May 29, 1984.

Mid-America Vocational Curriculum Consortium. Bylaws and Policies and Procedures. MAVCC State Directors Meeting Working Papers, Oct., 1983.

National Center for Research in Vocational Education. Annual report of program improvement projects. Columbus, OH: Author, 1978-83.

New York State Education Department. New York State Consortium for Career Education. Project Performance Report, Albany, 1979.

O'Connor, J. E. Consortium development: An NTS strategy for the 80's. Proceedings of a Decade of Changes: NTS professionalism in the 80's. Washington, DC, 1981.

REFERENCES

Rozanski, M. The why and how of collegiate international education consortia. California Journal of Teacher Education, Winter, 1983, 10 (1), 72-83.

Schilling, R. G. An analysis of the policy making process of the Interstate Distributive Education Curriculum Consortium. Unpublished doctoral dissertation, The Ohio State University, 1981.

Scott, H. V. Consortia in higher education: a sober reflection. Educational Record, 1977, 58 (4), 429-33.

Smith, A. Inservice education consortia development. Dissemination Report: Second Year - Ninth Cycle Teacher Corps. Washington, DC, 1976.

Vocational-Technical Education Consortium of States. Action plan for V-TECS. Thirty Second Board Meeting Working Papers. Jan., 1984.

Vocational-Technical Education Consortium of States. Bylaws. (Revised). Atlanta, GA: Author, 1984.

Vocational-Technical Education Consortium of States. Technical reference handbook for catalog development. (Third Edition). Atlanta, GA: Author, 1984.

APPENDIX A

CONSORTIUM ABSTRACTS

ACRONYM: AAVIM

TITLE: American Association for Vocational Instructional Materials

ADDRESS: Engineering Center, Athens, GA 30602

TELEPHONE: 404/542-2586

DATE OF FOUNDING: 1949

UNIT OF MEMBERSHIP: State and Other (10 Canadian Provinces and 2 Canadian Territories)

TYPE OF ORGANIZATIONAL STRUCTURE: Centralized

OBLIGATIONS OF MEMBERSHIP: About ½ of the states choose to pay a participation fee which is based on the number of vocational agriculture teachers in their state. The other half does not pay any participation fee.

BENEFITS OF MEMBERSHIP: Discount on materials is as follows: for participating states, if they pay fee - 65% discount when there is a state distribution center, 50% discount when teachers order direct from AAVIM; for participating states who do not pay fee - 40% discount when there is a state distribution center, 25% discount when teachers order direct from AAVIM. All participants can provide input into the development of materials, can have one person on the board of directors, can request technical assistance and workshops.

DESCRIPTION OF PRODUCTS: Technical manuals, teacher's guides, resource material, modules, audio-visual material (filmstrips, slide sets, tape-cassettes, transparencies and transparency masters), testing packages, exemplary vocational resources, and computer software.

AVAILABILITY OF PRODUCTS: All products are available from AAVIM and many AAVIM products are available from specific state distribution centers. Individuals, who are not teachers, can order directly from AAVIM and must pay full price for materials.

MEMBERS: All the United States and Canadian Provinces

CONTACT: Harold Parody

ACRONYM: AIT/CORD

TITLE: Agency for Instructional Technology/Center for Occupational Research and Development - Principles of Technology Project

ADDRESS: Box A, Bloomington, IN 47402

TELEPHONE: 812/339-2203

DATE OF FOUNDING: June, 1983

UNIT OF MEMBERSHIP: State, Province

TYPE OF ORGANIZATIONAL STRUCTURE: Centralized

OBLIGATIONS OF MEMBERSHIP: Consortium will exist for 3 years. Members can pay on a 3-year payment plan. Each member must pay $40,000 plus 5½¢ per K-12 enrollment for state.

BENEFITS OF MEMBERSHIP: Members receive one set of materials free, they have unrestricted and unlimited use of the materials, and they have the right to cooperate in helping to create the materials.

DESCRIPTION OF PRODUCTS: Thirteen (13) units of instructional videotape, print and laboratory exercises.

AVAILABILITY OF PRODUCTS: They are not ready to be marketed. When ready, members will determine how they will be distributed in their own state or province. Nonmembers will have to pay a surcharge.

MEMBERS: AK, Alberta, AZ AR, FL, ID, IL, IN, IA, KS, LA, ME, MD, MA, MN, MS, NB, NC, ND, OH, OK, Ontario, OR, PN, SC, UT, VT, VA, WA, WI

CONTACT: Bernie F. Lucroy

ACRONYM:	(no acronym)
TITLE:	Consortium for the Development of Professional Materials for Vocational Education
ADDRESS:	1960 Kenny Road, Columbus, OH 43210
TELEPHONE:	800/848-4815
DATE OF FOUNDING:	1978
UNIT OF MEMBERSHIP:	State
TYPE OF ORGANIZATIONAL STRUCTURE:	Centralized
OBLIGATIONS OF MEMBERSHIP:	Three levels of membership. Yearly fees are $33,360 - full membership (they pay for a complete product), $21,170 - associate membership (they pay ½ the cost of a product) and $12,600; limited membership (they pay 1/3 the cost of a product).
BENEFITS OF MEMBERSHIP:	All members receive a 20% discount on materials and quicker access to materials, they participate in development process and in field testing, and they decide what products will be developed. Full members can reproduce materials in-state in any quantity, they share in the materials development cost and expertise, they receive technical assistance, inservice workshops, and staff development.
DESCRIPTION OF PRODUCTS:	32 modules, 6 supportive guides, 1 slide-tape.
AVAILABILITY OF PRODUCTS:	Through AAVIM: American Association for Vocational Instructional Materials, Engineering Center, Athens, GA 30602 (404/542-2586)
MEMBERS:	FL, NM, KS, OH, PA, WV
CONTACT:	Bob Norton

ACRONYM:	IDECC
TITLE:	Interstate Distributive Education Curriculum Consortium
ADDRESS:	1564 West 1st Ave., Columbus, OH 43212
TELEPHONE:	614/486-6345
DATE OF FOUNDING:	1971
UNIT OF MEMBERSHIP:	State
TYPE OF ORGANIZATIONAL STRUCTURE:	Centralized and/or decentralized with members developing.
OBLIGATIONS OF MEMBERSHIP:	Annual cost to participant depends on the number of full time equivalent marketing and distributive education teachers in the state. Members can pay cash or contribute services (i.e. they credit development of materials).
BENEFITS OF MEMBERSHIP:	Members receive significant discounts on materials, technical assistance, direct involvement in curriculum research and development for marketing education, a role in the governance of the consortium, free or reduced cost teacher training, complimentary materials for teacher educators and state supervisors.
DESCRIPTION OF PRODUCTS:	Learning activity packages, training plans, student competency records, computer based curriculum, adult instructional materials, comprehensive occupational exams, and audio-visual materials. Microcomputer software will be available in Fiscal Year 1985.
AVAILABILITY OF PRODUCTS:	Materials are purchased through IDECC at 40% discount to members and at list price to non-members.
MEMBERS:	AL, AR, CA, DE, FL, GA, HI, IN, LA, ME, MI, MN, MS, NB, NH, NM, NY, NC, ND, OH, OK, PA, TN, TX, VA, WA, WV, WI, WY
CONTACT:	Jim Gleason

ACRONYM: MAVCC

TITLE: Mid-America Vocational Curriculum Consortium

ADDRESS: 1500 West 7th St., Stillwater, OK 74074

TELEPHONE: 405/377-2000

DATE OF FOUNDING: Feb. 1, 1975

UNIT OF MEMBERSHIP: State

TYPE OF ORGANIZATIONAL STRUCTURE: Centralized

OBLIGATIONS OF MEMBERSHIP: A fee of $15,000 annually.

BENEFITS OF MEMBERSHIP: Members receive discounts on products, technical assistance, inservice/workshops, staff development, assistance in locating existing materials, access through a toll-free number, communication link for multi-state area, and a delivery system for marketing materials.

DESCRIPTION OF PRODUCTS: Teacher materials, student materials, learning activity packages, media, and microcomputer software.

AVAILABILITY OF PRODUCTS: Products are available to members at a discount; they are available to non-members at approximately 200% higher prices.

MEMBERS: AR, CO, KS, IA, LA, NB, MO, ND, SD, OK, TX

CONTACT: Ann Benson

ACRONYM:	NNCCVTE
TITLE:	National Network for Curriculum Coordination in Vocational and Technical Education
ADDRESS:	Six (6) curriculum coordination centers at sites in six (6) regional areas of the U.S.
TELEPHONE:	217/786-6375
DATE OF FOUNDING	1972
UNIT OF MEMBERSHIP:	State
TYPE OF ORGANIZATIONAL STRUCTURE:	Collaborative
OBLIGATIONS OF MEMBERSHIP:	Attend regional and concurrent meetings to represent home state; participate in policy development and development of network products (non-direct costs).
BENEFITS OF MEMBERSHIP:	Technical assistance, inservice/workshops, staff development, assistance in locating existing materials, and free curriculum.
DESCRIPTION OF PRODUCTS:	Synthesis and analysis papers; task analyses.
AVAILABILITY OF PRODUCTS:	Free through the curriculum centers; ERIC.
MEMBERS:	All states and trust territories (57)
CONTACT:	Rebecca S. Douglass

ACRONYM: V-TECS

TITLE: Vocational-Technical Education Consortium of States

ADDRESS: 795 Peachtree St., N.E., Atlanta, GA 30365

TELEPHONE:

DATE OF FOUNDING: 1973

UNIT OF MEMBERSHIP: State and Other (Departments of the Army, Navy, Air Force and Marines)

TYPE OF ORGANIZATIONAL STRUCTURE: Centralized and/or decentralized with members developing

OBLIGATIONS OF MEMBERSHIP: It costs $20,000 to participate annually. Each member must provide either 1 or 2 products, depending on the size of the state.

BENEFITS OF MEMBERSHIP: Members receive discounts on products, camera-ready copy of all products, technical assistance, inservice workshops, staff development, assistance in locating existing materials, and a communication link for multi-state area.

DESCRIPTION OF PRODUCTS: Catalogs, Occupational Data Anslysis System, and criterion-referenced test item bank.

AVAILABILITY OF PRODUCTS: Catalogs are available to members within their own state, they are available to non-members at double the price from the Curriculum Publications Clearinghouse, Western Illinois University, Macomb, IL 61455. The Occupational Data Analysis System is available for free to members now and will be available for a fee to non-members after Sept. 1, 1984. It will be a year before the test item bank will be available.

MEMBERS: AL, FL, GA, SC, VA, WV, MD, PA, MI, IL, KY, MO, KS, MS, AZ

CONTACT: Ron McCage

APPENDIX B

COMPARISON CHARTS

COMPARISON OF MEMBERSHIP FEE STRUCTURES
(Assessed by Fiscal Year)

PI ALLOTMENT CATEGORIES	Current V-TECS Annual Fee	A V-TECS Annual Fee	B V-TECS Annual Fee	C V-TECS Annual Fee	D V-TECS Annual Fee	E V-TECS Annual Fee	F V-TECS Annual Fee	G V-TECS Annual Fee
$4 - $8 Million	20,000	25,000	25,000	25,000	10,000	20,000	20,000	20,000
$1.5 - $4 Million	20,000	20,000	20,000	20,000	15,000	20,000	20,000	20,000
$800,000 - $1.5 Million	20,000	15,000	15,000	15,000	20,000	20,000	20,000	15,000
$500,000 - $800,000	20,000	10,000	10,000	10,000	25,000	15,000	15,000	15,000
Below $150,000	20,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000
TOTAL of available budget for central office operations (with current membership under this plan)	$280,000	$285,000	$285,000	$285,000	$205,000	$280,000	$280,000	$265,000
TOTALS without changes	$280,000	$280,000	$280,000	$280,000	$280,000	$280,000	$280,000	$280,000

[redacted] AND COSTS OF PRODUCT DEVELOPMENT PER STATE

PI ALLOTMENT CATEGORIES	Current Products #/Cost*	A Products #/Cost*	B Products #/Cost*	C Products #/Cost*	D Products #/Cost*	E Products #/Cost*	F Products #/Cost*	G Products #/Cost*
$4 - $8 Million	2/$60,000	3/$90,000	3/$90,000	1/$30,000	3/$90,000	2/$60,000	2/$60,000	2/$60,000
$1.5 - $4 Million	2/$60,000	2/$60,000	2/$60,000	2/$60,000	2/$60,000	2/$60,000	1/$30,000	2/$60,000
$800,000 - $1.5 Million	2/$60,000 1/$30,000	2/$60,000	1/$30,000	2/$60,000	1/$30,000	1/$30,000	1/$30,000	1/$30,000
$150,000 - $800,000	1/$30,000	1/$30,000	0/0**	3/$90,000	0/0**	1+/$30,000	0/0**	0/0**
Below $150,000	1/$30,000	0/0**	0/0**	0/0**	0/0**	0/0**	0/0**	0/0**
TOTAL representing a return on membership costs (with current membership) under this plan	26/$810,000	32/$900,000	29/$870,000	24/$720,000	29/$870,000	25/$750,000	18/$540,000	25/$750,000
TOTAL without changes	26/$810,000	26/$810,000	26/$810,000	26/$810,000	26/$810,000	26/$810,000	26/$810,000	26/$810,000

*Cost is estimated at $30,000 per product based on an average cost computed from data supplied by members

** Reviews

+ Special

COMPARISON OF TOTAL COSTS TO STATE

PI ALLOTMENT CATEGORIES	Current Total Costs Per State*	A Total Costs Per State*	B Total Costs Per State*	C Total Costs Per State*	D Total Costs Per State*	E Total Costs Per State*	F Total Costs Per State*	G Total Costs Per State*
$4 - $8 Million	$95,000	$130,000	$130,000	$70,000	$115,000	$95,000	$95,000	$95,000
$1.5 - $4 Million	$90,000	$90,000	$90,000	$90,000	$85,000	$90,000	$60,000	$90,000
$800,000 - $1.5 Million	$85,000 $55,000	$80,000	$50,000	$80,000	$55,000	$55,000	$55,000	$50,000
$150,000 - $800,000	$55,000	$45,000	$15,000	$105,000	$30,000	$50,000	$20,000	$20,000
Below $150,000	$52,000	$7,000	$7,000	$7,000	$7,000	$7,000	$7,000	$7,000
TOTAL investment in development (with current membership) under this plan	$1.235 M	$1.39 M	$1.30 M	$1.15 M	$1.22 M	$1.175 M	$965,000	$1.16 M

* Cost is estimated at $30,000 per product based on an average cost computed from data supplied by members, plus membership fees, and estimated D&U costs.

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